



Agriculture & Rural Development Committee

The Future of Organic Farming in Wales
October 2002

# **Agriculture & Rural Development Committee**

#### Future of organic farming in Wales

#### **Foreword**



Wales has been at the forefront of the development of the organic sector within the UK and currently has a target to increase organic production to 10% of Welsh agricultural products by 2005. The expansion of the sector is seen as vital in securing the long-term future of farming in Wales. But despite significant growth in UK consumer demand for organic food and the availability of financial support for farmers converting to organic production, the

growth of the Welsh organic sector has faltered. This, coupled with reductions in the premium prices paid to organic producers, has led some to question if the 10% target can be reached, and the prospects for the sector more generally.

It was against this background that the Agriculture and Rural Development Committee decided to undertake an inquiry in to the future of organic farming and the support required for the sector. The Committee examined the environmental benefits and health implications associated with organic systems and considered current marketing and economic difficulties.

Our conclusion is that the sector should continue to be supported as an important aspect of sustainable agricultural policy. Central to this is enhanced funding based on the introduction of on-going maintenance payments and a strategic approach to market development in partnership with the sector. But the Committee does not wish to see the Government drive development for its own sake. Rather, the development of the organic sector should reflect market demands with public policy aiming to inform consumers and help Welsh producers identify opportunities and deliver high quality, competitive products to the market. To this end, we hope that the recommendations in this report will be accepted and implemented by the Welsh Assembly Government.

On behalf of the Committee, I should like to thank all those who submitted evidence or otherwise contributed to the review.

Glyn Davies AM

Chair, Agriculture and Rural Development Committee

October 2002

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#### Introduction

- 1. The UK market for organic food has developed since the 1970s, largely in the absence of specific government support. Consumers, concerned about the environmental and other consequences of some agricultural practices, have shown themselves willing to pay premium prices for organically produced food, so helping to offset the generally lower yields and higher costs of organic producers. The market has grown dramatically in recent years with the total value of UK retail sales now being around £1 billion. This, alongside government support for organic conversion and the desire of many farmers to adopt more sustainable farming methods, has led to an increase in organic production in Wales from some 3,000 hectares of land in 1998 to almost 43,000 hectares in 2002. As a proportion of Welsh agricultural output, organic production now represents about 3%, in line with the rest of the UK and the average across the whole of the European Union.
- 2. Wales has been at the forefront of the development of the sector in the UK. In March 1999, the Agri-food Partnership Organic Strategy Group published an action plan for the sector that included a target to increase production to 10% of Welsh agricultural products by 2005. As well as being the first part of the UK to set an explicit target in this way, Wales also led the way by establishing the Organic Centre Wales (OCW) to help implement the strategy and to provide a centre of expert knowledge and advice. Recently, significant effort has gone into integrating OCW with the broader services offered through Farming Connect.
- 3. Despite this, the growth of the sector in Wales has faltered. In 2001, there was a surge of supply as farmers who started conversion in 1999, when the new Organic Farming Scheme was introduced, achieved organic status. At the same time, the foot and mouth outbreak meant that activities related to informing and certifying new producers were suspended. Despite efforts to encourage producers to consider conversion as an option for recovery, the 3-4 fold increase in supplies in 2001 and the significant marketing problems that caused, has undermined producer confidence. Consequently, applications to the Organic Farming Scheme in the six months to the end of September 2002 totalled just 41 compared with more than 260 in 1999 when the scheme was introduced. Nonetheless, the future development of the sector remains central to a sustainable future for agriculture in Wales, especially given recent moves by the European Commission to give a more environmental focus to the Common Agricultural Policy. In the spring of 2002, therefore, the Agriculture and Rural Development Committee felt it timely to conduct an inquiry into the progress made and prospects for the sector.

#### **Terms of reference**

4. In April 2002, the Committee agreed the following terms of reference:

To assess the future prospects for organic farming in Wales, the appropriateness and achievability of current Welsh Assembly Government targets and consequent implications for policy and resource allocation within the budget for agriculture and rural development.

Written submissions of evidence were received from the bodies and individuals listed at Annex A.

In addition, oral evidence was taken in Committee from the following:

- Agri-food Partnership Organic Sector Strategy Group
- Dafydd Jones & Jonathan Rees, Young Farmers Clubs Wales
- Soil Association
- Food Standards Agency
- Welsh Consumer Council
- Dr Bernard Tinker editor of Shades of Green; A Review of UK Farming Systems, Royal Agricultural Society of England
- Sainsbury's
- Tesco
- 5. To inform our inquiry, the Committee visited the Trawscoed research farm of the Institute of Grassland and Environmental Research (IGER) and Rachel and Gareth Rowlands, the founders of *Rachel's Dairy*, Britain's first certified organic dairy. Advice and guidance was also received from the Organic Centre Wales, based in the University of Wales, Aberystwyth and from officials working for the Welsh Assembly Government. We are grateful to all who assisted us with our work.
- 6. The report and recommendations that follow represent the conclusions the Committee has drawn from the evidence presented to it. We hope that they will be taken forward by the Welsh Assembly Government in order to develop a robust and sustainable future for agriculture in Wales.

#### The benefits of organic farming

- 7. Organic farming seeks to work as much as possible with natural systems, avoiding synthetic fertilisers, pesticides and growth promoters, and emphasising the importance of soil health, animal welfare, care for the environment and the production of healthy and nutritious food. This approach is supported by a certification framework with independent auditing and explicit environmental objectives.
- 8. The delivery of these aims comes at a cost to organic producers in terms of lower output and higher input costs. To date in the UK, these costs have largely been passed onto consumers in the form of higher prices. But in an attempt to attract a broader, less ideological customer base and in the face of consumer and regulatory pressures on conventional agriculture to move in a similar direction, organic prices have reduced.
- 9. As the economics of organic production alter, so the sector's supporters argue for government financial support to offset the additional costs associated with environmentally-friendly practices. But in this regard the organic sector must compete with other agricultural systems, which increasingly claim to deliver the environmental, animal welfare and food quality benefits that society demands. In the course of our inquiry, the claims that can legitimately be made for organic farming, in particular the environmental, health and nutritional benefits it delivers, were questioned by some<sup>1</sup>.

#### **Environmental benefits**

- 10. In its evidence to the Committee, the Countryside Council for Wales (CCW) the statutory adviser to the National Assembly on nature conservation outlined its recent consideration of available research into the role of organic farming in delivering environmental benefits. CCW endorses organic farming as one of a suite of measures that will contribute to achieving a more sustainable approach to countryside management with the key underpinning of this position being 'that it has been demonstrated to deliver biodiversity benefits'<sup>2</sup>. This view coincides with that put forward by the Minister for Rural Development in a report to the Committee<sup>3</sup> and by the Department for Environment, Food and Rural Affairs (DEFRA) in their plan for organic farming in England<sup>4</sup>.
- 11. We are conscious that legitimate concerns were raised by others. For example, the Environment Agency Wales (EAW) informed the Committee that 'whilst many aspects associated with organic farming may be expected to bring positive benefits in terms of water quality and the water environment, there are

<sup>1</sup> e.g. evidence of Dr Bernard Tinker, editor of Shades of Green – A Review of UK Farming Systems and the submission of the Food Standards Agency.

<sup>2</sup> Written submission of the Countryside Council for Wales.

<sup>3</sup> See Minister's Report to ARD Committee 3 July 2002 (ARD 11-02 (p1))

<sup>4</sup> Action plan to develop organic food and farming in England: DEFRA July 2002

some issues which are of concern'. In particular, the Agency identified the use of permitted alternatives to organophosphate sheep dip chemicals under organic regimes, as a concern for aquatic fauna<sup>5</sup>.

12. Nonetheless, subject to the concerns of the EAW and others about particular aspects of organic farming regimes, the Committee would endorse the assessment that, on balance, the environmental effect of organic farming is a positive one. We recognise that most of the research upon which this assessment is based has been carried out in lowland habitats. Given the nature of the Welsh agricultural landscape, the Committee welcomes the steps being taken by CCW and OCW to look at the impact of organic systems on upland ecosystems.

#### Health and nutrition

For many consumers, 'health' is listed as the top reason for buying organically rather than conventionally produced food. It is important for the continued growth of the market, therefore, that the sector is able to justify claims that its practices contribute to enhanced food quality and safety. There is undoubtedly some scientific evidence to help support this assertion<sup>7</sup> and, to many, it makes intuitive sense that the lower chemical inputs associated with organic production will result in food that is somehow safer and of higher nutritional value. In its evidence to the Committee, though, the Food Standards Agency (FSA) made clear its assessment that organic food is not significantly different in terms of food safety and nutrition from food produced conventionally. This assessment is based on the FSA's consideration of all available scientific evidence and, as an independent Government Agency established to provide advice on food safety, the Committee must give due weight to its view. We would, though, wish to see a continuation of research to enable consumers to make informed choices about the relative merits of organically produced food.

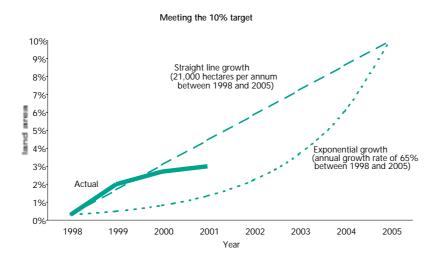
<sup>5</sup> Written submission of the Environment Agency Wales states that current organic farming standards preclude the use of organophosphate (OP) sheep dip chemicals, but permit (and therefore may be seen to encourage) the use of synthetic pyrethroid (SP) chemicals, which are many times more toxic to a range of aquatic fauna. Typically SPs are at least 100 times more toxic to aquatic invertebrates than OPs.

<sup>6</sup> See Written submission of Tesco and of the Welsh Consumer Council

<sup>7</sup> see inter alia written evidence from the Soil Association, Pembrokeshire Organic Group, IGER

#### The achievability of the current target

14. The target set in 1998 was to increase the organic proportion of Welsh agricultural output from 0.3% to 10% by the end of 2005<sup>8</sup>. The graph below illustrates the growth rates that were required to achieve this. Both straight line and exponential expansion paths are illustrated.



- 15. Actual growth in 1999 and 2000 was close to the straight line growth path and substantially greater than the 65% annual growth rate needed to achieve 10% by 2005, but this has clearly tailed off in 2001. Despite the slow down, catching up and achieving the target would be possible if around 26,000 ha were converted annually. Realistically, achieving this sort of growth appears unlikely, especially given the current lack of confidence amongst prospective converters.
- Whilst the Committee is disappointed that the target is unlikely to be 16. reached, we do not see this as the key issue. Rather, we are concerned with ensuring that the benefits of organic production are maximised and that the sector is able to grow in a sustainable fashion. The recommendations in this report should give a signal to current and prospective producers that our support for the organic sector is sincere and long term. But the Committee would also stress that the sector's growth should reflect consumer demand rather than the need to attain government targets. A single, easily understood target is useful in giving a lead to the industry but can carry the risk of becoming an end in itself. We recommend that future targets should be linked to the size of the market - for example, by aiming to see Welsh organic produce take an equivalent share of the UK organic market as conventionally produced Welsh output takes of the conventional market. We appreciate that the availability of reliable and timely data will need to improve if measurement of progress against such a target is to be possible.

<sup>8</sup> Although the target set relates to the proportion of *output* that is organic, the availability of timely and comprehensive data requires that the proportion of *land* farmed organically is taken as a proxy.

#### Future prospects for the domestic market

- 17. The domestic market for organic food has grown dramatically in recent years and is now worth in excess of £1 billion. Its likely continued growth was demonstrated in the evidence we heard from the UK's two largest supermarket retailers Tesco and Sainsbury's. Tesco forecast organic sales growth in 2002/03 of 40% and in the longer-term annual growth of 10-15%. Similarly, Sainsbury's expect the organic market to remain vigorous and to continue to expand.
- 18. Growth in the retail market does not necessarily translate into a corresponding increase in market potential for Welsh producers. Some will be taken by imported produce whilst attempts to boost the absolute size of the organic market will put pressure on retail and, in turn, farm-gate prices. Nonetheless, such anticipated market growth should be seen as an opportunity for Welsh producers rather than a threat, provided they are able to focus on customer demands.
- 19. From the evidence submitted to us it is clear that consumers are demanding:
  - Value for money price is undeniably a barrier to purchasing organic food for many consumers;
  - Product availability and convenience consumers have grown accustomed to produce that is available throughout the year and in a form convenient for modern lifestyles;
  - Safe and healthy food;
  - Food produced in an environmentally-friendly way with high standards of animal welfare.
- 20. Each of these raises issues for organic production. For example:
  - how to balance returns to compensate for lower yield and higher input costs with consumer and retailer pressure on prices;
  - how to ensure consistency and continuity of organic supply from small producers;
  - how to differentiate organic produce from conventional food standards using fewer chemical inputs and increasingly being marketed as healthy and environmentally-friendly.

## The Committee's view of the future of organic farming in Wales

- 21. In view of the environmental benefits it delivers and, having considered the future prospects for the sector, the Committee sees organic farming as an important part of our drive to make Welsh agriculture environmentally and economically sustainable. It complements the image of Wales as a place producing high quality food in an environmentally friendly way and we have a strong base to build on through the work of the Agri-food Strategy Group and the existence of the OCW as a centre of expert advice and guidance. We therefore consider that continued public support for the sector is justified, especially in the light of likely reforms of the CAP and the need to make best use of funds from modulation.
- 22. For farmers considering their plans for the future, converting to organic production is certainly an option. The organic market is likely to continue to grow as part of a general demand from consumers for high quality food produced to high standards of environmental and animal welfare care. But as those same market pressures and the reform of the CAP push conventional agriculture in a similar direction, farmers should be aware that premia for organic produce will come under pressure.
- 23. Recently, the sector has experienced similar economic difficulties to the rest of agriculture with production imbalances, import competition and supply chain difficulties placing pressure on prices. This illustrates that organic production is not a panacea for Welsh agriculture as with the conventional sector, only high quality, well-managed organic farms that respond to market needs will prosper.
- 24. In signalling our fundamental support for the sector as an aspect of sustainable agricultural policy, the Committee does not wish to see the Government drive development for its own sake. Rather, the development of the organic sector should reflect market demands with public policy aiming to inform consumers and help Welsh producers identify opportunities and deliver high quality, competitive products to the market.

We would make the following recommendations to assist in this process.

#### **Recommendations:**

#### **Maintenance support payments**

- 25. The UK is one of the few EU countries not providing ongoing maintenance support for organic producers although DEFRA recently announced its intention to provide ongoing payments to organic farmers in England after conversion. To date, support has instead been concentrated on conversion support with producers reliant on market returns thereafter. The case for introducing some form of ongoing maintenance payment for organic producers was put to us by many. Agriculture is already over-reliant on public support and the Committee has considered the arguments for and against replacing one form of market support with another. On balance, the Committee considers that organic production should be encouraged and supported since:
  - it contributes to the Assembly's wider aims for sustainable agricultural industry and practices; and
  - Welsh producers should not be disadvantaged in the marketplace relative to their counterparts in England and the rest of Europe.

The Committee recommends that the Welsh Assembly Government should introduce as a matter of urgency a scheme of ongoing maintenance payments tailored to Welsh needs. The Welsh Assembly Government should consider how best this should be financed in the short term, perhaps through refocusing under-spend from the existing Organic Farming Scheme.

# Integration of organic support with other agri-environmental measures

26. The principal justification for the payment of public support to organic producers relates to the environmental public goods organic production provides. As we have noted elsewhere, the delivery of such environmental gain is at the heart of proposed reforms to the CAP and to other policies delivered by the National Assembly. In the longer term, therefore, the Committee recommends that support for organic farming should form one part of an integrated suite of agri-environment schemes in Wales. Maintenance support could be in the form of an organic stewardship tier as part of a broad and shallow general agri-environment scheme. The Committee will consider the shape of future agri-environment schemes in Wales in its next major inquiry.

#### **Funding**

27. The Committee recommends that the delivery of ongoing maintenance payments for organic production and the integration of support for organic farming into a suite of agri-environment schemes, should be seen as priorities for the Welsh Assembly Government when considering funding and the use of resources arising from modulation.

#### Supply chain

- 28. Fragmentation of the supply chain is an issue affecting all of the main organic sectors in Wales. The organic dairy sector has been particularly hard hit by recent problems of oversupply whilst supply chain co-ordination and the planning of marketing in advance of production are becoming issues for the organic meat and horticulture sectors respectively.
- 29. The need to develop more integrated supply chains is a feature common to much of Welsh agriculture, not just the organic sector. Indeed, the existence of a specific organic strategy group within the Agri-food Partnership gives the sector an advantage through a network already dedicated to enabling the sort of cooperation and integration required. The Committee therefore welcomes the establishment of the new Horticulture Strategy Group within the Partnership umbrella, and an organic horticulture sub-group linking it and the Organic Strategy Group. We recommend that the Welsh Assembly Government and the Welsh Development Agency (WDA) should continue to provide support for producer groups consistent with a strategic approach to market **development**. The sector as a whole must recognise that supply chain fragmentation represents a serious threat to long-term success and that improved co-ordination and collaboration between individuals and producer groups is vital if market planning, supply and the availability of appropriate processing facilities in Wales is to be improved.
- 30. Linked to this, the Committee would reiterate its support for the provision of high quality advice and market information through OCW and Farming Connect to ensure that producers and processors can make informed decisions about conversion, marketing and grant applications. To this end we recommend that the Welsh Assembly Government should continue to provide financial support to the Organic Centre Wales.
- 31. Developments announced in the English Action Plan will improve the availability of retail market information at a UK level. Data at a Welsh level should allow those working in the sector to identify market opportunities and to assess progress in exploiting these. To ensure that the development of future policies is soundly based, the Committee recommends that **reliable**, **timely and relevant information should be collected all along the organic supply chain.**
- 32. Over three quarters of organic food sales are made through the major retailers and, as outlined earlier in the report, the leading supermarkets forecast substantial growth in organic sales. It is essential, therefore, that organic producers in Wales benefit from this outlet. Given the relatively small output of most organic producers in Wales, co-ordination between farmers and processors will be essential if the product demands placed by retailers are to be met and a fair return obtained for producers. The Committee recommends that the Welsh Assembly Government and the Agri-food Partnership sector group should seek to facilitate understanding and a mutually beneficial relationship between the supermarkets and the Welsh organic sector.

- 33. Not all organic producers in Wales wish to channel output through the supermarkets. For some, direct selling through farmers' markets, box schemes or arrangements with local catering or retail outlets will be preferred. The Committee has promoted the advantages of such local connections in earlier work' and therefore recommends that the work of OCW/Farming Connect, the sector strategy group and other public bodies in facilitating such marketing developments should continue to be supported.
- 34. A further contribution to the development of local markets for organic producers could be made through public procurement policies. The encouragement of local, quality-based procurement policies by public bodies is another step the Committee recommended last year following our inquiry into diversifying the rural economy. To this end we welcome the current pilot scheme involving Powys County Council, the Soil Association and Cardiff University. We recommend that the experience of pilot schemes encouraging the public procurement of locally produced goods should be more widely applied.
- 35. In recommending that the future development of the sector should be market led, the Committee recognises the role of the public sector in enhancing demand. The Committee recommends that, as part of its general approach to marketing and promoting Welsh agricultural products, the Welsh Assembly Government and the WDA should ensure that the distinctive needs of the organic sector are addressed. In addition, consideration should be given to a publicity initiative to explain what is meant by organic production and what consumers can expect from organic foods.

# The availability of organic seed

36. From 2004, seed for use in organic production systems will have to be produced organically. At present only 35% of seed mixture is required to be organic but even this is placing heavy demand on the supply of organically produced forage seed. Evidence provided to the Committee by the Institute of Grassland and Environmental Research (IGER) suggests that, to meet the target of 10% of production being organic by 2005,and comply with the 100% organic seed regulation, will require some 400 tonnes of grass seed and 50 tonnes of legume seed each year in Wales. Currently only 15 tonnes of organic forage seed is produced in the UK and none in Wales. Lack of suitable seed will constrain the development of the sector in Wales and leave farmers dependent on imported seed that is often inappropriate for Welsh climatic conditions. The Committee therefore recommends that the Welsh Assembly Government should put in place a strategy to encourage the domestic supply of organically produced seed of the most appropriate varieties to ensure the continued development of the organic sector in Wales.

<sup>9</sup> Diversifying the Rural Economy June 2001.

#### Research and development

37. The Committee regards research and development as a priority area and would emphasise the need for the Welsh Assembly Government's policies to be informed and evidence-based. To this end, we are fortunate in Wales to have centres of excellence such as IGER from which organic producers and public policy makers can benefit. Control of major research budgets lies with DEFRA and other Whitehall Departments, rather than the Welsh Assembly Government. We therefore welcome the measures identified in the English Action Plan for Organic Farming to increase and better identify and co-ordinate research funds for the sector. We recommend that the Welsh Assembly Government should use its influence to focus research resource on matters of particular significance to Wales such as the environmental impact of organic farming on upland ecosystems. The Committee offers its support to the efforts of CCW and OCW in this regard and other work that will help to clarify the contribution of organic production to our wider environmental objectives. Similarly, it has been clear to the Committee during the course of its work that the debate on the health and nutritional effects of organic food is not yet settled and that further work is needed in this field.

# List of those providing written submissions

Cambrian Organics Ltd

Country Land & Business Association

Countryside Council for Wales

Elm Farm Research Centre

**Environment Agency Wales** 

Farmers' Union of Wales

Food Standards Agency

Institute of Grassland and Environmental Research

National Farmers' Union Cymru

Pembrokeshire Organic Group

RSPB Cymru

Royal Welsh Agricultural Society Limited

Sainsbury's

Everard Smith and Professor Terry Marsden, Cardiff University

Soil Association

Tesco

Dr P.B. Tinker

Welsh Agri-food Partnership Organic Strategy Group

Welsh Consumer Council

**Annex B** 

# **Summary of recommendations**

- a) the Welsh Assembly Government should introduce as a matter of urgency a scheme of ongoing maintenance payments tailored to Welsh needs (paragraph 25).
- b) support for organic farming should form one part of an integrated suite of agri-environment schemes in Wales (paragraph 26).
- c) the delivery of ongoing maintenance payments for organic production and the integration of support for organic farming into a suite of agrienvironment schemes, should be seen as a priorities for the Welsh Assembly Government when considering funding and the use of resources arising from modulation (paragraph 27).
- d) future targets should be linked to the size of the market (paragraph 16).
- e) the Welsh Assembly Government and the Welsh Development Agency should continue to provide support for organic producer groups consistent with a strategic approach to market development. (paragraph 29).
- f) the Welsh Assembly Government should continue to provide financial support to the Organic Centre Wales (paragraph 30).
- g) reliable, timely and relevant information should be collected all along the organic supply chain (paragraph 31).
- h) the Welsh Assembly Government and the Agri-food Partnership sector group should seek to facilitate understanding and a mutually beneficial relationship between the supermarkets and the Welsh organic sector (paragraph 32).
- i) the work of OCW/Farming Connect, the sector strategy group and other public bodies in facilitating marketing developments should continue to be supported (paragraph 33).
- j) the experience of pilot schemes encouraging the public procurement of locally produced goods should be more widely applied (paragraph 34).
- k) as part of its general approach to marketing and promoting Welsh agricultural products, the Welsh Assembly Government and the WDA should ensure that the distinctive needs of the organic sector are addressed. Consideration should be given to a publicity initiative to explain what is meant by organic production and what consumers can expect from organic foods (paragraph 35).
- the Welsh Assembly Government should put in place a strategy to encourage the domestic supply of organically produced seed of the most appropriate varieties to ensure the continued development of the organic sector in Wales (paragraph 36).
- m) the Welsh Assembly Government should use its influence to focus research resource on matters of particular significance to Wales (paragraph 37).

# Organic system financial performance and business prospects (information provided by Organic Centre Wales)

#### Organic milk production

#### **Market Prospects**

In 1999 and 2000, many producers converted in response to market demand, more generous conversion support and the incentive of a fixed price (29.5 ppl) for organic milk. Most of these farms achieved organic status in 2001 and 2002, resulting in a 3-400% increase in supply of organic milk, which despite continued market growth, led to serious oversupply. Substantial volumes of milk (approaching 50% of production) were sold onto the conventional market with a consequent reduction in the average price received by organic producers.

Spring 2002 saw the milk oversupply begin to level off. However, many producers still in conversion have delayed the final conversion of stock due to limited market access since no milk groups have offered any milk contracts since summer 2001. This is unlikely to change in the near future, although with a significant slow down in the number of new farmers converting and a continuing steady growth of the retail market estimated at 20% per annum, many market analysts expect to see an improvement in the supply and demand situation by 2003.

To help this process, the Organic Milk Suppliers Co-operative Wales and Calon Wen, the two main specialist organic milk co-operatives in Wales, have launched their own initiatives to promote the animal welfare and environmental benefits of eating and drinking organic dairy products. In addition, multiple retailers have set up promotional campaigns for the organic milk market, although it is too early to assess the impact of these.

In the short term, while some producers may be getting as much as 29.5 ppl for a proportion of their milk, with conventional sales of the remainder bringing their average price down to 24 ppl or less, others producers with supply contracts are obtaining 21-22 ppl, and those selling on conventional markets alone only 18-19 ppl.

### **Dairy enterprise performance**

Assuming prices of 23 ppl for organic and 18 ppl for conventional milk, the gross margin per cow is higher under organic than conventional production. The milk price difference of 5 ppl compensates for small reductions in yield and higher costs, but if the organic milk has to be sold at conventional prices, then gross margin per cow will be lower under organic management. Despite reduced use of purchased feed, high organic feed prices can lead to higher expenditure and these costs may increase further when current derogations to allow a proportion of the diet to contain non-organic feed expire in 2005. The implementation of animal health plans required by organic standards can also result in increased costs.

The major difference in performance between the systems relates to stocking rates. This is partly due to reductions in forage yields with reduced fertiliser use, but mainly due to the reduced reliance on purchased feed inputs requiring more home-produced forage per cow. As a consequence of the stocking rate differences, a premium of 5 ppl generates a similar gross margin to conventional, whereas selling at conventional prices results in a significant reduction in performance per hectare.

Gross margins for conventinal and organic herds: 2001/02 prices

Net farm incomes on conventional and organic dairy farms: 2000/01

	Convention	al Organic		Conventional	Organic
Milk yield (litres/cow)	5,800	5,500	Milk yield (litres/cow)	5,743	5,053
Milk price (ppl)	18	23	Milk price (ppl)	17	29
Stocking rate			Size (ha)	58	69
(livestockunit/ha)	2.2	1.7	. ,		
			£/hectare		
£/cow			Dairy output	£1,254	£1,595
Financial output	£1,044	£1,265	Other output	£400	£387
less					
Purchased feed	£195	£220	Total output	£1,654	£1,982
Other costs	£110	£130	less		
			Feeds	£372	£281
Total variable costs	£305	£350	Other livestock costs	£177	£266
equals	2333	2555	Crop costs	£100	£84
Gross margin	£739	£915	equals		
at conventional prices		£640	Whole farm margin	£1,005	£1,351
less		20.10	less		
Forage costs	£85	£60	Labour	£161	£290
equals	203	200	Machinery	£293	£285
Gross margin inc. forage	£654	£855	Other fixed costs	£319	£315
Gross margin inc forage	2034	2033	equals		
(£/ha)	£1,373	£1,368	Net Farm income	£232	£461
at conventional	L1,3/3	1,500			
		£1,037			
prices	-	£1,U3/			

Source: Institute of Rural Studies, UWA

# Whole farm profitability

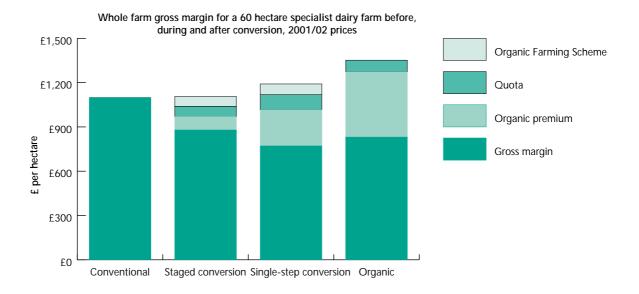
Survey data for the year 2000/01 for the dairy sector in Wales illustrate some key differences between conventional and organic dairy herds. The 12 ppl organic premium in 2000/01 resulted in a more than £300/ha advantage with respect to dairy and total output as well as whole farm gross margin. Higher labour costs reduced the advantage, but still left the organic farms with higher net farm income levels. The small sample size for the organic farms means that the data should be interpreted with caution as extreme values on individual farms (e.g. very low yields on one farm, very high labour costs on another) have a significant impact on the average values.

If the 23 ppl price assumed in the gross margin above had applied, the total farm output and gross margin values would have been similar between the two groups,

and the net farm income at £175/ha would be lower for the organic group due to the labour costs. The application of conventional prices to the organic sample would result in a negative net farm income of -£128/ha, £360/ha lower than for the conventional farms.

#### Costs of conversion

Models prepared for DEFRA to evaluate the impact of conversion on different farm types provide an insight into the role of the organic premium and the Organic Farming Scheme payments, as well as different possible strategies for conversion. The chart clearly illustrates the importance of the organic premium, which is shown separately from the gross margin at conventional prices. Even with the reduced premiums available in 2001, the model indicates some potential for increased returns under organic management, but this is based on assumptions of higher relative performance of organic systems than in the gross margin and Welsh survey data above. Where premiums are available, a whole farm ('crash') conversion can be financially advantageous, as it allows premiums to be achieved earlier, but a staged conversion, involving conversion of parts of the farm in successive years, can help spread the risks and learning costs of conversion, particularly if premiums are uncertain.



#### **Summary**

Organic milk production is potentially a profitable alternative for dairy producers, but this depends significantly on the price that can be obtained and keeping costs under control. A premium of 5-6 ppl is necessary to achieve similar performance to conventional for the average farm. But if the profitability of conventional farms is already too low, either on average due to low prices in the sector, or due to poor performance or other factors, achieving a similar income organically is not going to solve their financial problems. The potential of the organic sector should therefore be seen not as a means of rescuing unviable holdings, but as a way for viable holdings to produce with significant advantages for the environment, and for the specialist marketing and added-value processing activities to contribute to rural development where possible.

#### Organic beef and sheep production

#### **Market prospects**

The 2001/02 period was a very difficult year for livestock producers with the FMD epidemic overshadowing other developments in the market. In 2001, supplies of both organic beef and sheep had increased as many producers completed conversion between 2000 and 2001. This increase in production helped to satisfy growing demand and substitute imports for many outlets. However, UK producers were faced with increasing pressure from cheaper imports and more established import supply chains where consistency of supply and specification is guaranteed, especially in the organic beef sector. Nevertheless, both organic lamb and beef have experienced temporary oversupply problems resulting in downward price pressures with lamb trading between 220 and 270p kg/dw and beef at 220 to 240p kg/dw.

Demand for organic beef and sheep continues to rise with assistance from the media and in-store promotions nationwide. The activities of several producer groups, such as Graig Farm, the Organic Livestock Marketing Co-operative, Cambrian Organics and the Welsh Hook Meat Centre, as well as buyers for the multiple retailers (including Waitrose, M&S, Tesco and Sainsbury), have significantly improved marketability of livestock, meat and meat products in recent years. However, there is a need for further co-operation and good planning to achieve stability in production and marketing of Welsh lamb and beef. In particular, the following aspects are of growing concern to the organic livestock sector:

- Seasonal production of organic lamb creates flushes on the autumn market, whereas planning more varied lambing times and finishing of over-wintered hoggets would extend the marketing period.
- An increasing imbalance between store and finishing units has caused many organic stores to be finished on non-organic holdings and sold into conventional markets.
- Hill farms need to establish collaboration with organic lowland farms to be sure that stock have access to finishing pasture.
- The increasing risk of smaller abattoirs withdrawing from organic certification or closure altogether due to meat inspection charges remains a cause for concern.

Future projections for both organic lamb and beef suggest that supplies will continue to increase in 2002/03, therefore planning production to meet demand will continue to be crucial for success for producers thinking of conversion.

## **Gross margin summary**

The key factors influencing the performance of organic beef and sheep production are prices, stocking rates and feed and forage costs, as growth rates are likely to be similar or just below conventional levels. Since 1996, organic livestock prices have remained relatively static, while conventional prices fell

significantly as a consequence of BSE and FMD, leading to the emergence of a 'premium' price, which has narrowed in 2001/02 as conventional prices have recovered, and for lamb the price differentials are now similar to those that existed five years ago.

For beef enterprises, the higher prices lead to higher performance per animal, despite the higher costs of feed for organic beef finishing, and higher prices also compensate for the reduced stocking rates. However, without the higher organic price, organic beef finishing would yield lower returns than conventional. For suckler cow enterprises, the costs of purchased feed are less significant, so that the potential exists for similar performance to be achieved even at conventional prices.

Gross margins for conventional and organic beef production, 2001/02 prices

	Suckler cows		24-month finishing	
	Conventional	Organic	Conventional	Organic
Store price (£/kg lw)	1	1.25	-	-
Finished price (£/kg dcw)	-	-	1.7	2.2
Weight (kg/head lw or dcw)	270	270	290	290
£ per head				
Sales net of purchases	£246	£300	£212	£287
plus				
Support payments	£167	£167	£162	£162
equals				
Total output	£413	£467	£374	£449
less				
Feedstuffs	£90	£60	£60	£90
Other inputs	£115	£115	£75	£75
Total variable costs	£205	£175	£135	£165
equals				
Gross margin less	£208	£292	£239	£284
Forage costs	£90	£75	£70	£55
equals Gross margin inc. forage	£118	£217	£169	£229
0				
Stocking rate (head/ha)	1.5	1.2	2.0	1.6
Gross margin inc. forage (£/ha) Gross margin at conventional p	£177 rices	£260	£338	£336
(£/hd) Gross margin at conventional p (£/ha)	-	£163	-	£154
	rices -	£196	-	£247

Source: Institute of Rural Studies, UWA

For sheep enterprises, physical performance can be similar to conventional, provided that appropriate health management and parasite control strategies are adopted, including the integration of cattle and grazing management. Despite this, the recovery in conventional prices means that organic prices no longer result in higher performance per hectare. At conventional prices, organic flocks may achieve similar financial performance per animal, but performance per hectare would be significantly reduced.

Gross margins for conventional and organic sheep production, 2001/02 prices

	Lowlar		Uplan	
	Conventional	Organic (	Conventional	Organic
Lamb price (C /kg daw)	(2.20	(2.40	(2.20	£2.60
Lamb price (£/kg dcw)	£2.30	£2.60	£2.30	
Lambs finished per ewe	1.2	1.2	1	2
Lamb liveweight (kg)	40	38	36	34
£ per ewe				
Sales net of purchases	£59	£63	£42	£44
plus .				
Support payments	£13	£13	£17	£17
equals				
Total output	£72	£76	£59	£61
less				
Feedstuffs	£9	£7	£9	£7
Other inputs	£8	£8	£7	£7
Total variable costs	£16	£15	£15	£14
equals				
Gross margin	£56	£61	£44	£48
less	200			
Forage costs	£10	£9	£9	£7
101486 60363	210	L	L	
Gross margin inc. forage	£46	£52	£35	£41
Gross margin inc. rotage	<i>L</i> ¬0	LJZ	233	741
Stocking rate (ewes/ha)	10	8	8	6
Gross margin inc. forage (£/ha)	£456	£416	£276	£244
Gross margin at conventional pr				
(£/hd)	-	£45	_	£36
Gross margin at conventional pr	rices	3		
(£/ha)	-	£364	_	£215
(27 114)		LJUT		LLIJ

Source: Institute of Rural Studies, UWA

#### Whole farm profitability

Survey data for the year 1998/99 (the most recent currently available) for UK organic cattle and sheep farms illustrate some key differences in performance. Compared with Welsh conventional cattle and sheep farms, the major feature is the lower stocking rate on the organic farms — although the numbers of stock kept are similar, farm size is higher on the organic sample, thus compensating for the reduced stocking rates.

The lowland organic cattle and sheep farms generated a higher level of output per ha, although the results are influenced by the greater presence of dairy herds in the organic sample. This may also account for the significantly higher level of labour, in particular paid labour, machinery and other fixed costs on the organic lowland farms. Net farm incomes negative for both groups in that year, but are lower still for the organic group as a result of the higher fixed costs, despite the advantage at the output and gross margin levels.

The upland organic cattle and sheep farms experienced slightly lower levels of output, but reduced feed costs resulted in similar gross margins. Fixed costs were lower for the organic group, resulting in a slightly higher net farm income, which was just positive for both groups.

Net farm incomes on medium-sized cattle and sheep farms, 1998/99

	Lowlar	nd	Uplan	ıd
	Conventional	Organic	Conventional	Organic
Cattle (livestock units)	67	74	73	69
Sheep (livestock units)	49	37	68	91
Cereals (ha)	15	15	2	19
Forage (eff. ha)	62	85	89	152
• ,	1.9	1.3	1.5	1.1
Stocking rate (LU/eff. ha)		1.5 100		
Size (ha)	80	100	91	171
£ per hectare				
Dairy output	£56	£224	£24	£O
Other cattle output	£236	£211	£244	£181
Sheep output	£227	£176	£371	£258
Other output	£204	£429	£80	£196
Total output	£724	£1,040	£719	£634
less				
Feeds	£118	£164	£119	£74
Other livestock costs	£55	£105	£71	£45
Crop costs	£85	£36	£59	£67
equals				
Whole farm margin	£465	£735	£470	£448
less				
Labour	£74	£243	£84	£30
Machinery	£174	£215	£133	£206
Other fixed costs	£235	£324	£204	£141
equals				
Net farm income	-£17	-£81	£49	£72

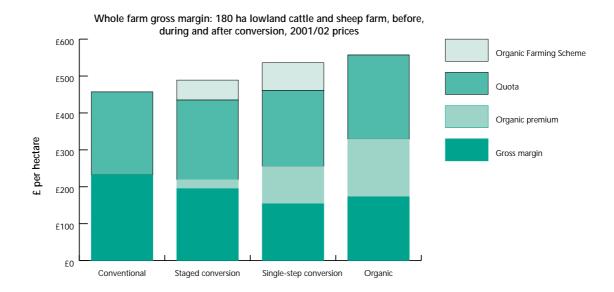
Source: Institute of Rural Studies, UWA

#### **Costs of conversion**

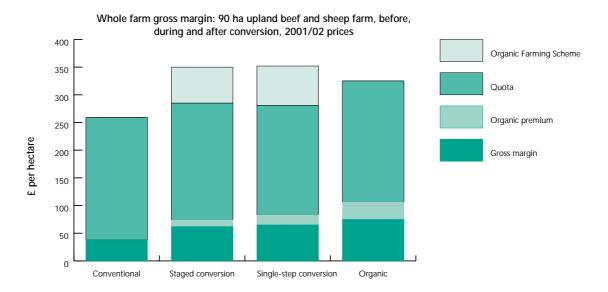
Models prepared for DEFRA to evaluate the impact of conversion on different farm types provide an insight into the role of the organic premium and the Organic Farming Scheme payments, as well as different possible strategies for conversion.

For lowland cattle and sheep farms, which include a proportion of arable cropping, the organic premium is essential to maintain similar gross margins. The premiums available in early 2002, combined with the increased proportion of cattle, introduction of home-reared replacements and reduced reliance on purchased feed stuffs combined to result in better potential performance under organic management. As conventional prices recover, leading to a narrowing of the differential between organic and conventional stock prices, the contribution of the premium to achieving higher performance under organic management will be reduced, and it is likely that similar overall margins will result. Support

payments make a significant contribution to the whole farm margin, but the value of these can be maintained under organic management despite the reduction in stocking rates.



The **upland** cattle and sheep farm models are based on a predominantly sheep farm moving to a more mixed system with reduced stocking rates and homerearing of replacements. This seems to offer financial advantages, even at conventional prices, but this may simply be a reflection of the assumptions concerning the initial starting point. The organic premium plays a less important role than for other systems, but any reduction will still have an impact on overall performance. The most important factor determining the whole farm margin is the contribution from support payments. With the reduction in stocking rates, there is potential for income from this source to be reduced, but with careful planning, income can be maintained at similar levels to conventional. Upland farmers converting to organic production need to ensure that they have adequate access to forage conservation areas that will provide for the feed requirements of stock in winter to comply with standards, as well as housing for the cattle that may need to be introduced to help with parasite control and grassland management.



#### **Summary**

The survey data illustrate that while organic farms can achieve similar incomes to conventional, the finances for both organic and conventional groups are at best marginal, and the models illustrate the reliance of both lowland and upland cattle and sheep farms on support payments. Organic premium prices are still important to maintain relative incomes, but are less important on cattle and sheep farms compared with dairy and arable holdings. The main factors that will influence performance are the increased role of cattle, with implications for housing and winter feed provision, as well as the emphasis on closed flocks and herds and increased on feeds produced on the farm, as organic conserved forage is difficult to source and expensive to buy in.

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